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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

WYSZOMIERSKI, GEORGE P

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1742

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,723

Applicant(s)

HAMPDEN-SMITH ET AL.

Examiner

George P Wyszomierski

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-120 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7-22, 31, 32, 34-42, 44, 46, 64-67, 69-84, 93-95, and 97-112 are rejected under 35 U.S.C. 102(b) as being anticipated by Schultz et al. (U.S. Patent 5,985,356).

Schultz discloses a process which includes depositing a plurality of reacted materials upon specific regions of a substrate and analyzing various properties of the deposited materials. The materials may be a plurality of materials of different compositions. Specific disclosure of various aspects of the claimed invention can be found in the prior art as follows:

- a) Claims 3, 32, 66 and 95--See Schultz column 30, lines 31-34.
- b) Claims 7, 8, 69, 70, 97 and 98--See Schultz columns 34 and 35.
- c) Claims 9, 71 and 99--See Schultz column 20, lines 19-22.
- d) Claims 10-12, 37-39, 72-74, and 100-102--See Schultz column 15, line 45 to column 16, line 39.
- e) Claims 14, 76 and 104--See Schultz column 9, lines 22-23.
- f) Claims 15, 42, 77 and 105--See Schultz Figures 3H, 3I, 5D, 5E, 5F, 5G, 5H, and 5I and their corresponding description in the specification of Schultz.
- g) Claims 16, 17, 78, 79, 106 and 107--See Schultz column 17, lines 14-17.
- h) Claims 19-22, 81-84, and 108-112--See Schultz columns 6 and 7.

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3. Claims 6, 23-30, 33, 43, 45, 47-63, 68, 85-92, 96, and 113-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz et al.

The Schultz process, described supra, does not specify the amount of variance in concentration, temperature or composition as recited in instant claims 6, 33, 68 or 96, is not specific to the making of the particular classes of materials as recited in instant claims 23-27, 47-63, 85-89, and 113-117, the particle size of claims 28-30, 90-92, or 118-120, continuously analyzing particles as they exit a reactor as in claim 43, or measuring the precise property of claims 45 and 62. These differences are not seen as resulting in a patentable distinction between the prior art process and that presently claimed because:

a) The precise amounts of variance in the processing parameters would depend largely upon the properties desired in the final materials. The numerical values as presently claimed would fall within the purview of the variation in reaction parameters as disclosed in Schultz column 30, lines 17-65.

b) The making of the types of materials as recited in the instant claims would fall within the general classes of materials as disclosed in columns 9 and 10 of Schultz.

c) With regard to particle size, because the reactants used and the conditions of reaction may be the same in either the prior art or the claimed invention, one of skill in the art would believe that the particle size of the final products would likewise be the same in either instance, absent evidence to the contrary.

d) One important facet of the Schultz process is that arrays of materials can be screened for various properties, i.e. as disclosed in columns 26-28 of Schultz. It would clearly be seen as beneficial by one of skill in the art to perform this screening as soon as possible, e.g. as soon as reacted particles are produced, in order to minimize the production of materials with unwanted properties.

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e) The properties of claims 45 and 62 would fall within the "Morphology" category in Table I of Schultz.

Consequently, a prima facie case of obviousness is established between the disclosure of Schultz et al. and the presently claimed invention.

4. Claims 1-5, 13-15, 18-21, 24-27, 31, 40-43, 64-67, 75-77, 80-83, 86-89, 93-95, 103-105, 108-111, and 114-117 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Application Serial No. 09/821,848.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '848 patent essentially define certain embodiments of the process as set forth in the instant claims, i.e. preferably an embodiment in which the materials produced and analyzed include a layered linear system comprising polymer and/or electrocatalyst materials. The steps of the process as defined in the instant claims are performed in the same order and for the same purpose as in the '848 claims. Because practicing the process according to the '848 claims would necessitate practicing the process of the instant claims, no patentable distinction is seen between the two sets of claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not yet been patented.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Applicant's response filed December 27, 2002 has been considered with the following effect:

a) The formal drawings have been received and are approved.

b) Applicant's response indicates that the rejection of the claims under 35 USC 112, second paragraph, has been overcome. One of skill in the art, having read the specification, would readily understand what is being claimed.

c) Applicant's arguments with regard to various prior art rejections made in the previous Office Action (Paper no. 4) have been noted. These rejections are withdrawn in view of the new grounds of rejection detailed supra, based upon art submitted by Applicant that is clearly more relevant to the instant claims than that applied in the previous Office Action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for this Group is (703) 872-9310 for all correspondence except for After Final amendments in which case the Fax number is (703) 872-9311. The Right fax number for this examiner is (703) 872-9039. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GPW
March 10, 2003



GEORGE WYSZOMIERSKI
PRIMARY EXAMINER